

Understanding the Pathogens and Symptoms of Common Diseases Affecting Cannabis

Understanding the five most common diseases affecting cannabis plants along with their symptoms will help growers identify problems early enough so they can take necessary actions accordingly before things get too out of hand potentially resulting in severe crop losses. Identifying these pests early, through means such as lab testing, is a critical part required for successful farming practices. These are five common pathogens affecting cannabis and some of their symptoms.

Downy Mildew

Downy Mildew is a fungal disease that affects the leaves of Cannabis plants. The fungus thrives in moist, warm conditions and causes lesions on the upper surface of the leaves. These lesions are yellowish-brown spots that cause chlorosis or yellowing of leaf tissue. The lower side of infected leaves is covered with a white to grayish-white mold. Downy mildew can be prevented by avoiding wetting the foliage while watering and providing adequate air circulation around plants. Using fungicides can also help reduce their spread.

Powdery Mildew

Powdery mildew is another fungal disease caused by fungi from the genus *Erysiphe* and *Oidium*. It commonly affects Cannabis plants during flowering season when humidity levels are high, and temperatures are low. This disease appears on both sides of leaves as white, powder-like masses which eventually turns into grey patches with reddish borders around them as they mature over time. Powdery mildew can be prevented by providing adequate air circulation to avoid any moisture build up in foliage, using resistant varieties against specific pathogens, avoiding overcrowding among different plant species, regular spraying of fungicides like sulfur or neem oil onto plants' surfaces can also be effective.

Root Rot

Root rot is mostly caused by *Pythium spp.*, *Phytophthora spp.*, *Rhizoctonia solani* & *Fusarium oxysporum* affecting root systems resulting into stunted growth and even death at times depending upon severity level reached before timely intervention takes place. Preventive measures include maintaining soil/substrate pH levels within range suitable for cannabis growth (6–7), ensuring proper aeration & drainage system setup so that excess water drain away easily without pooling up inside grow room, use phosphorus rich fertilizers at regular intervals (twice per month approx.) for healthy root development helping stronger resistance towards various abiotic stresses including those posed due to unfavorable climatic conditions and applying antifungal compounds using foliar spray technique so that they reach affect area quickly.

Gray Mold

Gray mold is an airborne fungal disease caused by *Botrytis cinerea* which affects many plant species including *Cannabis sativa* plants during flowering stage when humidity levels remain high over extended period. It appears as gray or brown spots at first on young buds or flowers which eventually increases in size as time passes leading to shriveling up or rotting away of affected parts. Preventive measures against gray mold includes avoiding overcrowding among different plant species, proper ventilation, reducing humidity levels inside grow rooms, removing dead leaves regularly, using



resistant varieties against specific pathogens if available. In cases where preventive measures fail, fungicides can be used but it should only be done after consulting a professional because certain fungicides are not suitable for human consumption and may damage beneficial insect populations that help naturally control these pathogen diseases such as predatory mites etc.

Septoria Leaf Spot

Septoria leaf spot is mostly caused by fungi from *Septoria lycopersici* which affects tomato crops but it has also been observed infecting Cannabis especially during rainy seasons when there's excess moisture present inside grow rooms leading to favorable conditions for these pathogens to thrive upon. Symptoms include small circular dark brown spots surrounded with yellow halos on both sides of infected leaves causing chlorosis leading eventually towards tissue death of affected parts if not taken care of soon enough. Preventive measures include proper ventilation, avoiding overcrowding among different plant forms / strains and using resistant varieties if available against specific pathogens.

Rimrock Analytical specializes in molecular testing and identification of plant pathogens. With our easy to use mail-in test kits, it's never been easier to identify common pathogens, giving you an edge to act quickly before broader losses may occur. Contact us for more information.